

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

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FEDERAL COMMUNICATIONS COMMISSION  
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**In the Matter of**

# Amendment of Part 68 of the Commission's Rules to Accommodate Terminal Equipment Providing 1.544 Mbps Digital Services

~~CC Docket No. 94-667~~  
RM 8492

### COMMENTS OF ADC KENTROX

ADC Kentrox Industries, Inc. ("ADC Kentrox"), by its undersigned counsel, hereby submits these comments in response to the Public Notice released June 23, 1994, in the above-captioned proceeding. As discussed further below, ADC Kentrox strongly opposes Alcatel Network Systems, Inc.'s ("Alcatel") petition for rulemaking to amend Part 68 of the Federal Communications Commission's ("Commission") Rules so that 1.544 Mbps digital terminals using a DSX interface can be marketed to private users without being registered and without using protective circuitry.

## BACKGROUND

ADC Kentrox is a wholly owned subsidiary of ADC Telecommunication, Inc. ("ADC Telecom"), a leading U.S. equipment manufacturer that designs, manufactures and markets telecommunications equipment products used to deliver video programming and telephony service to consumers worldwide. ADC Kentrox's products are designed for use in the public telecommunications networks maintained by telephone operating companies, interexchange

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carriers, other telecommunications common carriers, and broadcast and cable TV networks, and for use in private telecommunications networks maintained by large businesses, government agencies, and educational and other non-profit institutions. These products are used to interconnect digitally the PSTN and the customer premises network. In addition, these products monitor circuits and provide system protection and other network management functions. ADC Kentrox's extensive experience and expertise in manufacturing equipment that satisfies the requirements of Part 68 of the Commission's Rules render it well-qualified to comment on Alcatel's petition for rulemaking to amend Part 68.

### **ALCATEL'S PETITION**

Alcatel proposes to amend Section 68.3 by adding a definition for "digital terminal" so that the scope of Part 68 registration and protective circuitry requirements covering 1.544 Mbps digital terminals is limited to 1.544 Mbps digital terminals that contain voice channel equipment terminating in the public switched telephone network ("PSTN") or that interconnect to the PSTN with a cable exceeding 1500 feet.<sup>1/</sup> Alcatel's proposed definition for "digital terminal" exempts from Part 68 compliance all "non-voice" (e.g., data) digital terminal equipment interconnected

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<sup>1/</sup> Alcatel proposes to add the following definition to Section 68.3:

**Digital terminal:** A digital device operating at a 1.544 Mbps or lower rate which contains voice channel equipment terminating in the public switched telephone network or which interconnects the public switched telephone network with a cable exceeding 1500 feet in length.

Petition at 6.

to the PSTN with a cable less than 1500 feet in length. Alcatel makes a number of assertions in support of this proposal. First, Alcatel claims that its proposed definition leaves intact the requirements of Part 68 for digital terminals where protection is necessary.<sup>2/</sup> Next, Alcatel states that the registration and protective circuitry requirements of Part 68 are only necessary in a hostile environment, such as where the cable interconnection is located outside or where voice processing occurs.<sup>3/</sup> Since terminals using a DSX interface interconnect in a controlled office environment and are not interconnected where PSTN voice signal processing occur they should not be subject to the requirements of Part 68.<sup>4/</sup> Alcatel also asserts that under its proposed definition, the PSTN and 1.544 Mbps private line services are still protected because the digital terminals exempted from Part 68 requirements must still meet industry standards.<sup>5/</sup> Finally, Alcatel alleges that manufacturers of terminals using DSX interfaces cannot meet the requirements of Part 68.<sup>6/</sup>

As described in detail below, the Commission should reject Alcatel's proposal to exempt 1.544 Mbps digital terminals using a DSX interface from the registration and protective circuitry requirements of Part 68. It is apparent that the proposed rule is more an attempt by Alcatel to cure its own marketing problems than an amendment necessary to address a technical or policy problem. Furthermore, adoption of the proposed rule will give Alcatel an unfair competitive

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<sup>2/</sup> Petition at 7.

<sup>3/</sup> Petition at 6.

<sup>4/</sup> *Id.*

<sup>5/</sup> Petition at 7.

<sup>6/</sup> Petition at 11.

advantage over other Part 68 equipment manufacturers and disturb the equitable regulatory regime that currently exists under Part 68. Finally, under Alcatel's scheme, the Commission would abdicate an important responsibility of ensuring the safety and operation of the PSTN and would leave that duty to the whims of prevailing industry standards.

In sum, Alcatel fails to provide any technical, policy or practical reason to amend the Commission's Rules as proposed. The changes proposed by Alcatel serve no useful regulatory purpose and should not be adopted. Accordingly, ADC Kentrox urges the Commission to summarily reject Alcatel's petition.

## **DISCUSSION**

### **I. Alcatel Fails to Provide Any Technical or Practical Reason to Amend Part 68**

Alcatel's arguments purporting to support its proposed amendment are without merit. In fact, Alcatel's definition of digital terminal is arbitrary and does nothing to distinguish between cases where protective circuitry is required and cases where it is not required. Instead, Alcatel is attempting to disturb a stable regulatory environment that treats all Part 68 equipment manufacturers equally in order to gain an unfair competitive advantage over other manufacturers of Part 68 equipment. Alcatel fails to explain in its petition why data digital terminal equipment should be exempt from Part 68 registration and protective circuitry requirements while voice digital terminal equipment should meet those requirements.<sup>2/</sup> This arbitrary distinction appears to be tailored simply to exempt equipment manufactured by Alcatel from Part 68 compliance.

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<sup>2/</sup> Alcatel simply asserts without support that "[r]egistration under Part 68 only is necessary in a hostile environment, such as where the cable interconnection is located outside or where voice processing occurs." Petition at 6.

Alcatel argues that the registration and protective circuitry requirements of Part 68 are only necessary in a hostile environment, such as where the cable interconnection is located outside. Yet, Alcatel's proposed definition for a digital terminal does not provide for the location of cable interconnection. Instead, Alcatel's provision for a "cable not exceeding 1500 feet in length" is certainly sufficient for locating a cable interconnection outside.

Alcatel also makes the unfounded argument that requiring CSU protection for private user interconnection to the PSTN or to 1.544 Mbps circuits "on average, triples the overall cost of a digital terminal from \$7,000 to \$21,000 . . ." Petition at 6. Without citing any factual or other evidence, Alcatel represents that CSUs add a cost of approximately \$14,000. Petition at 6, n.9. That data widely exaggerates typical CSU prices and misrepresents the costs of providing CSU-protected terminals. Indeed, ADC Kentrox's CSU products are available for as little as \$1,000. Since Alcatel's estimates grossly overstate prevailing prices, there is no economic policy reason for the Commission to amend Part 68 in order to make available lower equipment prices.

## **II. Alcatel's Proposal Undermines and Misinterprets the Public Interest Purpose of the Commission's Part 68 Registration Program**

Alcatel asserts that under its proposal, the PSTN and 1.544 Mbps private line services are still protected because digital terminals exempt from Part 68 requirements must meet industry standards before they can be interconnected. ADC Kentrox submits that this is not a sufficient guarantee of protection for the PSTN. Alcatel's proposed rule does not cite any industry standards that digital terminals exempt from Part 68 requirements must follow. In addition, the reliance on private sector national and international industry standards would lead to the

balkanization of the regulatory scheme designed to protect the PSTN from harm. Alcatel clearly misunderstands the purpose of Part 68. Section 68.1 states that "[t]he purpose of the rules and regulations in this part is to provide uniform standards for the protection of the telephone network from harm caused by the connection of terminal equipment and associated wiring thereto .... "<sup>8/</sup>

Again, Alcatel demonstrates its misunderstanding of the purpose of Part 68 by stating that "it is appropriate for terminal equipment specifications to be defined by the user instead of by the carrier."<sup>9/</sup> Part 68 is not a requirement imposed by the carriers; it is imposed by the Commission to protect the PSTN from harm caused by the connection of terminal equipment and associated wiring. Alcatel has failed to demonstrate that the self-regulation it proposes will adequately protect the telephone network from harm caused by the connection of terminal equipment.

Alcatel also denigrates the complexity of interconnection by asserting that the PSTN is used merely as a bridge for transmission between customer-provided circuits in the context of special access services.<sup>10/</sup> Connection through the PSTN is not merely through a pair of wires; it involves active and complex electronics that may cause harm to the telephone network when proper safeguards, such as those set forth in Part 68, are not employed.

In an attempt to lend credence to its proposal, Alcatel makes unsupported assertions that manufacturers of terminals with DSX interfaces cannot meet the requirements of Part 68 and that

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<sup>8/</sup> 47 C.F.R. § 68.1 (1993)(emphasis added).

<sup>9/</sup> *Id.*

<sup>10/</sup> Petition at 2.

the requirements of Part 68 could threaten network operations. Alcatel's assertions are directly contradicted by the large number of Part 68 registered equipment on the market. Further, Alcatel's assertion that Part 68 requirements could threaten network operations is wholly inconsistent with the purpose of and the Commission's public interest objectives underlying Part 68.

For instance, Alcatel claims that the Part 68 attenuation requirements of three sizes of output pulses are inapplicable to its equipment.<sup>11/</sup> This assertion overlooks the reason that attenuation requirements are in Part 68 -- to prevent cross-talk between wires of adjacent circuits. Similarly, Alcatel contends that the discrepancy between Part 68 specifications and how 1.544 Mbps circuits operate prevents data recovery and forecloses the ability to communicate between the network switch and the digital terminal.<sup>12/</sup> This assertion implies that Part 68 registered equipment will not function in the PSTN, which is directly contradicted by everyday experience. Alcatel also asserts digital terminals operating under Part 68 pulse rate specifications would probably disable operation on an associated channel because of the wide discrepancy between pulse width and height values.<sup>13/</sup> Yet Alcatel offers no data to support its assertion. In fact, Alcatel's assertion of a wide discrepancy between Part 68 pulse rate specifications (279-369 n. secs.) and ANSI pulse rate specifications (460-627 n. secs.) is frivolous. ANSI T1.403 does not set forth a pulse rate specification of 460-627 n. sec. Alcatel's cursory attempt to offer a

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<sup>11/</sup> Petition at 14.

<sup>12/</sup> Petition at 15.

<sup>13/</sup> Petition at 15.

technical justification for its proposed amendment is wholly inadequate to support Alcatel's proposed amendment.

In Section II. D. of its petition, Alcatel asserts that it "merely wishes to be allowed to market to private customers the same products (*i.e.*, digital terminals exempt from Part 68 registration and from being protected by a [channel service unit ("CSU")]) that it sells to companies comprising the PSTN."<sup>14/</sup> This assertion once again underscores Alcatel's misunderstanding of the purpose of Part 68. Part 68 is an interface specification for connection to the PSTN. Obviously, Part 68 cannot control how carriers implement their internal networks.

### **III. The Commission Should Reject Alcatel's Attempt to Gain an Unfair Competitive Advantage Through Amendment of Part 68 Rules \_\_\_\_\_**

The Commission should also dismiss Alcatel's complaint that it has been placed in an unfavorable position relative to its competition. Alcatel states that it "is losing sales to private customers because other digital terminal manufacturers do not include the price of, or declare a need for, a CSU in their bid."<sup>15/</sup> This argument perhaps reveals the motivating factor behind Alcatel's request for an amendment to Part 68 -- it wants to solve its own marketing problems by exempting its products from the Commission's Rules. However, there is nothing in Part 68 that burdens only Alcatel and no other equipment manufacturer. The requirements in Part 68 establish a "level playing field" that all manufacturers must follow. In fact, if the Commission adopts Alcatel's proposal, the Commission would simply disturb the existing equitable regulatory

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<sup>14/</sup> Petition at 8.

<sup>15/</sup> Petition at 8.



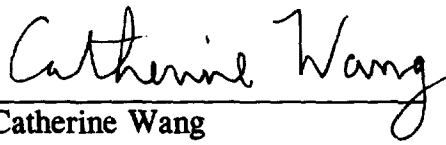
environment under Part 68. Moreover, the Commission should not amend Part 68 simply because Alcatel's marketing department cannot figure out how to structure its bids. At bottom, Alcatel's petition is simply an attempt to amend the Commission's well-grounded rules to give Alcatel an unfair competitive advantage over other Part 68 equipment manufacturers and to make up for the failures of Alcatel's marketing department.

### **CONCLUSION**

For the reasons discussed above, ADC Kentrox strongly urges the Commission to deny Alcatel's petition.

Respectfully submitted,

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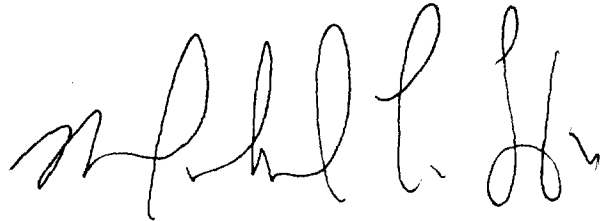
**CERTIFICATE OF SERVICE**

I hereby certify that on this 22nd day of August 1994, copies of the foregoing Comments of ADC Kentrox Industries, Inc. were served by hand-delivery\* or first-class mail, postage prepaid, on the following:

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A handwritten signature in black ink, appearing to read 'Michael C. Wu', written over a horizontal line.

Michael C. Wu